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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/716,465

**Applicant(s)**

JOSSET ET AL.

**Examiner**

ERIC W. SHEPPERD

**Art Unit**

2453

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 September 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/22)
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date: \_\_\_\_\_

**DETAILED ACTION**

1. Claims 1-19 are pending.

***Response to Amendment***

2. In response the amendment filed 09/17/2009: Applicant has amended the claims, and the objections and the corresponding 35 USC § 112 rejections have been withdrawn.

***Response to Arguments***

3. Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.
4. Applicant argues that Jorgensen does not disclose a processor configured to "receive a message designating an application", and function based on the message as recited in claim 1. Examiner respectfully disagrees. Jorgensen discloses "control passes to module 1632 from module 1624" (column 69 lines 34-36). In module 1624 the QoS requirement is lookup based up ("Look-up IP-Flow application's QoS requirement" Fig. 16A item 1632), which would obviously require access to some sort of application designation when control is passed in order to succeed. The examiner submits that the claim does not specify where, or from what, the message originates. While the combination of Jorgensen and Bloebaum does not explicitly disclose a processor, or multiple processors, upon which the processing modules of Jorgensen would run, the Thomas reference has been used to show the obviousness of using multiple processors to execute multiple components.

***Claim Objections***

5. Claim 1 is objected to because of the following informalities: Claim 1 lines 21-22 recite the phrase "from which stream come is connected", the term "come" should be "came". Claim 7 line 3 ends with "the communication terminal in". Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-19 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The "invention" for the purpose of the first paragraph analysis is defined by the claims. The description requirement is simply that the claimed subject matter must be described in the specification. The function of the description requirement is to ensure that the applicant had possession of the invention on the filing date of the application. The application need not describe the claim limitations exactly, but must be sufficiently clear for one of ordinary skill in the art to recognize that the applicant's invention encompasses the recited limitations. The description requirement is not met if the application does not expressly or inherently disclose the claimed invention.

Specification does not explicitly describe nor is sufficiently clear for one of ordinary skill in art to recognize the following “a first processor and a second processor” as cited in claim 1.

Claims 1-19 are unclear that the one ordinarily skilled in the art cannot recognize the encompassed claim limitations. Especially, limitations of independent claims are not found supported by the specification of this instant application. Dependent claims also contain similar underlined amended terms as indicated above and are dependent on independent claims and thus are unclear how they would have been encompassed as well. While adding limitations like “first processor” or “second processor” to the claim language clearly indicates a hardware association, the instant application’s specification makes no mention of “processor”, “processors” or “multiprocessor” configurations. The specification merely discloses processing means and extraction means without explicitly describing each as a separate “processor”.

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claim 1-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

9. Claim 1 line 18 recites the limitation “said processor” which lacks proper antecedent basis. For purposes of applying prior art the limitation has been construed as “said first processor”.

10. Claim 2 line 4 recites the limitation "said extraction means are" which lacks proper antecedent basis. For purposes of applying prior art the limitation has been construed as "said second processor is".
11. Claim 8 lines 1-2 recites "wherein said second processor is installed in a protocol stack of a communication terminal core" which is vague and indefinite. It is unclear how a "processor" which is hardware can be "installed in a protocol stack" which is inherently software.
12. Claims 3-7 an 9-19 incorporate the deficiencies of claim 1, through dependency, and are therefore also rejected.

***Claim Rejections - 35 USC § 103***

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claims 1-5, 7-10 and 12-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jorgensen (US 6,590,885 B1), in view of Bloebaum (US 6,535,815 B2), in view of Thomas (US 2002/0198945 A1).
15. As to claim 1, Jorgensen substantially discloses a system for controlling processes associated with streams of application data for a communication network including communication stations configured to exchange data streams and connected

to communication terminals ("Client" Jorgensen Fig. 2D, item 120d-e *connected to* "Wireless Base Station", item 302 *through* "CPE Subscriber Station", item 294d-e) provided with at least one application ("The RSVP protocol can be used by a host, on behalf of an application, to request a specific QoS from the network for particular data streams or flows." Jorgensen column 45 lines 16-18), the system for controlling processes comprising:

a first processing means ("Packet Characterization" Jorgensen Fig. 16A, item 1604 *and* "Packet Classification", item 1606 *and* "IP-Flow Presentation", item 1608) configured to

receive a message designating an application ("If the IP flow is new, control passes to module 1632 from module 1624 of the packet header identification component 1602" Jorgensen column 69 lines 34-36 *and* Jorgensen Fig. 16A, item 1650 "Provide IP-Flow QoS-Class to Frame Scheduler"), and

deliver service data representative of at least one process associated with said designated application ("IP flow presentation component 1608 prepares and presents the IP data flow packets to flow scheduler 634" column 70 lines 19-20);

a second processing means ("Packet Header Identification" Jorgensen Fig. 16A, item 1602) configured to

receive a stream of data sent by a communication terminal ("A stream of packets ... is received at packet header identification component 1602 ... from one or more subscriber stations Jorgensen column 68 lines 42-46),

access the core to determine the application associated with said received

stream ("Packet header analysis module determines from source application packet header table the type of source application making the IP flow" Jorgensen column 69 lines 5-7), and

deliver to said first processing means a message designating said determined application ("If the IP flow is a new IP flow, then the identification information about the new IP flow is added to table 1626, and control passes from analysis module 1624 to module 1632 of the packet characterization component 1604" Jorgensen column 69 lines 13-17); and

a controller ("Uplink Flow Scheduler" Jorgensen Fig. 16B, item 634) configured to,

receive service data delivered by said first processing means ("the reservation request block has been ... transmitted to uplink flow scheduler from uplink flow analyzer 632" Jorgensen column 71 lines 25-29), and

deliver configuration data to enable at least one process suited to the requirements of the application associated with the received stream of data ("Module 1662 informs MAC uplink subframe scheduler 1666 of the reservation" Jorgensen column 71 lines 31-33) by the communication station ("In one embodiment, uplink flow scheduler 634 is physically located in wireless base station 302" Jorgensen column 70 lines 58-59) to which the terminal from which said stream came is connected ("Client" Jorgensen Fig. 2D, item 120d-e *connected to* "Wireless Base Station", item 302 *through* "CPE Subscriber Station", item 294d-e).

Jorgensen fails to disclose accessing a core containing information



representative of at least one application of the terminal, and the first and second processing means being a first and second processor.

Bloebaum describes a method by which a mobile terminal equipped with a GPS receiver can optimize time for estimating its current position based on one or more quality of service (QoS) parameters.

With this in mind, Bloebaum discloses accessing a core containing information representative of at least one application of the terminal ("the positioning application 26 executing in microprocessor 116 could automatically utilize a default QoS value, which the user has previously chosen for a particular application and stored in a data memory" Bloebaum column 5 lines 36-40 *in* "Mobile Terminal" Fig. 2, item 100). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to combine the Bloebaum method of mobile terminal QoS determination with the QoS system of Jorgensen as it would provide greater user control over desired quality of service by allowing a terminal to specify the type of QoS versus QoS being assigned by another system.

The above combination of Jorgensen and Bloebaum fails to explicitly disclose the first and second processing means being a first and second processor.

Thomas describes an apparatus for scanning data in transfer.

With this in mind, Thomas discloses the first and second processing means being a first and second processor (Thomas [0040] *one or more multi-level transfer components operating in a multiple processor system*). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to combine

the transfer scanning method of Thomas with the above combined QoS system as it would advantageously provide "load distribution, resource and/or processor management" (Thomas [0040]) lines 6-14).

16. As to claim 2, the above combined art substantially discloses the invention as claimed as described in claim 1, including wherein

said communication terminal core includes an interface ("Microprocessor" Bloebaum Fig. 2, item 116 *connected to* "RAM" item 120) for real time control of the data streams associated with said at least one application ("microprocessor determines a desired quality of service (QoS)" Bloebaum column 5 lines 31-33), and

said second processor is configured to access said interface to determine the application associated with said received stream ("microprocessor could automatically utilize a default QoS value, which the user has previously chosen for a particular application and stored in data memory 120" Bloebaum column 5 lines 36-40), upon receiving a data stream ("a positioning application ... request a position update from the mobile terminal" Bloebaum column 5 lines 26-29).

17. As to claim 3, the above combined art substantially discloses the invention as claimed in claim 1, including further comprising:

memory configured to store a table of correspondences between said application and said service data ("IP-Flow QoS Requirement Table" Jorgensen Fig. 16A, item 1634), wherein said first processor is configured to access said memory means to

determine service data stored in correspondence with said designated application, upon receiving a message designating an application ("in IP flow QoS requirements lookup module 1632 the QoS requirements for the application associated with the IP flow are determined. Module 1632 performs this operation by looking up the application in IP flow QoS requirement table 1634" Jorgensen column 69 lines 38-42).

18. As to claim 4, the above combined art substantially discloses the invention as claimed in claim 3, including wherein

said first processor is configured to send a user via a graphical interface of the communication terminal a message requesting said service data associated with the designated application, if service data corresponding to the designated application is not stored in said memory ("Keypad 122 and display 124 provide a user interface allowing the user to interact with the mobile terminal 100" Bloebaum column 5 lines 21-22 and "microprocessor 116 may, ... prompt the user with a menu of choices related to desired positioning quality of service (QoS)" Bloebaum column 5 lines 31-33).

19. As to claim 5, the above combined art substantially discloses the invention as claimed as described in claim 3, including wherein said second processor is configured to update said correspondence table based on information received from the communication terminal ("a default QoS value, for which the user has previously chosen for a particular application and stored in data memory" Bloebaum column 5 lines 37-40).

20. As to claim 7, the above combined art substantially discloses the invention as claimed as described in claim 5, including wherein said information received is delivered by a graphical interface of the communication terminal ("To make this determination of QoS, microprocessor 116 may, ... prompt the user with a menu of choices related to desired positioning quality of service (QoS)" Bloebaum column 5 lines 31-33).

21. As to claim 8, the above combined art substantially discloses the invention as claimed as described in claim 1, including wherein second processor is installed in a protocol stack of a communication terminal core ("the information about the IP streams is communicated 'vertically' in the protocol stack model from the application layer (i.e. OSI level 7) to the PRIMMA MAC layer (i.e. OSI level 2) for bandwidth reservation and application switching purposes" Jorgensen column 22 lines 20-25).

22. As to claim 9, the above combined art substantially discloses the invention as claimed as described in claim 1, including wherein said communication station has at least one protocol stack arranged in layers, including a MAC layer, and said controller is configured to deliver configuration data for configuring said MAC layer as a function of the requirements associated with a stream to be transmitted or received, upon receiving service data ("Once the nature and QoS requirements of each IP stream are determined by other portions of the system, this information is communicated to the PRIMMA MAC layer so that the IP flows of each application can be switched to appropriate destinations in a proper priority order" Jorgenson column 22 lines 8-12 and "Module

1662 informs MAC uplink subframe scheduler 1666 of the reservation" Jorgensen column 71 lines 31-33).

23. As to claim 10, the above combined art substantially discloses the invention as claimed as described in claim 1, including wherein said first processor is configured to deliver to said controller service data representative of at least one process associated with streams to be received from an application installed in a remote communication terminal ("Provide IP-Flow QoS-Class to Frame Scheduler" Fig. 16A, item 1650 *originating from* "Subscriber Work-Station" Fig. 16A, item 120d).

24. As to claim 12, the above combined art substantially discloses the invention as claimed as described in claim 1, including wherein said first processor and said controller are configured to exchange service messages containing said service data in accordance with an exchange protocol chosen from at least one of a proprietary protocol (*not required*), the SNMP ("simple network management protocol (SNMP)" Jorgensen column 47 lines 62-63), the XML protocol (*not required*), and the RSVP ("The present invention supports RSVP by providing ... recognition and support of RSVP messages, including: Path messages, Reservation (Resv), Path teardown messages, Resv teardown messages, Path error messages, Resv error messages, and Confirmation messages" Jorgensen column 43 lines 44-49).

25. As to claim 13, the above combined art substantially discloses the invention as claimed as described in claim 1, including wherein said process is chosen from a group including at least one of quality of service ("a resource allocation means optimizing end-user quality of service (QoS)" Jorgensen column 3 lines 50-51), encryption (*not required*), authentication (*not required*), session set-up (*not required*), stream prioritization (*not required*), and stream elimination (*not required*).

26. As to claim 14, the above combined art substantially discloses the invention as claimed as described in claim 1, including a communication terminal ("Mobile Terminal" Bloebaum Fig. 2 item 100) including said first processor and said second processor of a control system as claimed in claim 1 (Thomas [0040] *one or more multi-level transfer components operating in a multiple processor system*).

27. As to claim 15, the above combined art substantially discloses the invention as claimed as described in claim 1, including a communication terminal including a control system as claimed in claim 1 (*see above claim 1 communication terminal is included as part of system*).

28. As to claim 16, the above combined art substantially discloses the invention as claimed as described in claim 1, including a communication station including said controller of a control system as claimed in claim 1 ("In one embodiment, the uplink flow scheduler 634 is located in wireless base station 302" Jorgensen column 70 lines 58-

59).

29. As to claim 17, the above combined art substantially discloses the invention as claimed as described in claim 16, including the communication station taking the form of a satellite terminal ("such as, e.g., RF communication, cable RF, and satellite link, to antenna 290d of wireless base station 302" Jorgensen columns 82 lines 1-3).

30. As to claim 18, the above combined art substantially discloses the invention as claimed as described in claim 1, including a communication network including a plurality of communication stations ( "Wireless Base Station" Jorgensen Fig. 2A, item 302 *and multiple "base stations" Bloebaum Fig. 1, item 12 obvious to one of ordinary skill in the art*) including said controller of a system as claimed in claim 1 ("In one embodiment, the uplink flow scheduler 634 is located in wireless base station 302" Jorgensen column 70 lines 58-59) and communication terminals (*Multiple "Mobile Terminal" Bloebaum Fig. 1 item 100 shown*) including said first processor and said second processor of said system (Thomas [0040] *one or more multi-level transfer components operating in a multiple processor system*).

31. As to claim 19, the above combined art substantially discloses the invention as claimed as described in claim 18, including the communication network, chosen in a group including at least satellite networks and wireless networks ("such as, e.g., RF communication, cable RF, and satellite link, to antenna 290d of wireless base station

302" Jorgensen columns 82 lines 1-3).

32. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jorgensen (US 6,590,885 B1), in view of Bloebaum (US 6,535,815 B2), in view of Thomas (US 2002/0198945 A1), in view of Reichmeyer et al (US 6,286,038 B1).

33. As to claim 6, the above combined art substantially discloses the invention as claimed as described in claim 5 failing however to include wherein said information received is contained in a configuration file received by the communication terminal.

Reichmeyer describes a method of remotely configuring a network device by propagating information to the network device from a configuration server.

With this in mind, Reichmeyer discloses wherein said information received is contained in a configuration file received by the communication terminal ("the central configuration server 26 then propagates configuration information in the form of a ... Domain Configuration File (DCF) ... DCF may include differentiated services and QoS parameters." Reichmeyer columns 10-11 lines 54-2). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains to combine the remote configuration method of Reichmeyer with the system of the above combined art as it would speed up configuration by removing the necessity of reconfiguring every terminal locally upon initiation.



34. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jorgensen (US 6,590,885 B1), in view of Bloebaum (US 6,535,815 B2), in view of Thomas (US 2002/0198945 A1), in view of Amin et al (US 6,854,014 B1).

35. As to claim 11, the above combined art substantially discloses the invention as claimed as described in claim 1, failing however to include wherein said controller receives an authorization delivered by a central server.

Amin describes a method of a user communicating in an IP centric distributed network that uses servicing to establish network resources for establishment of connections.

With this in mind, Amin discloses wherein said controller receives an authorization delivered by a central server ("The allied Service Application Server sends an Authorization Request message to the AAA server to authorize the service, QoS, and bandwidth requested" Amin column 14 lines 48-50 *and* "When the request is authorized, the Authorization Server sends the Authorization Response to the allied Service Application Server" Amin column 14 lines 56-58). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains to combine the authorization of Amin with the system of the above combined art as it provides the advantage of increasing control over a limited amount of resources to ensure that they are allocated as desired.

***Conclusion***

36. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **ERIC W. SHEPPERD** whose telephone number is (571)270-5654. The examiner can normally be reached on **Monday - Thursday, Alt. Friday, 7:30 AM - 5PM, EST**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Joseph Thomas** can be reached on (571)272-6776. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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